

a fact which is more than usually accentuated in the case of Duncan's largest specimen (see Pl. XV, Fig. 1), and although such a phenomenon may be due to some kind of deformity it is possible, as suggested by Dr. Bather, that it may have a wider and more structural explanation.

LOCALITIES.—Duncan's specimens collected by Mr. Bauerman were obtained at Wadi Nagh el Bader, and are preserved in the Museum of the Geological Society bearing the numbers 9003 and 9004. The specimens in the Geological Survey of Egypt Collection were obtained by Mr. Barron from the following places:—Wadi el Araba ($S_{\frac{3}{2}}$, 4117); Wadi Budra ($S_{\frac{3}{11}}$, 3614), examples numerous and associated with *Exogyra Africana*; south end of Wadi el Araba ($S_{\frac{3}{12}}$, 3815), also found with the above-named shell; head of Wadi Esba ($S_{\frac{3}{24}}$, 3870), found with *Hemiaster Heberti* and *Exogyra olisiponensis*; Wadi Sifa ($S_{\frac{3}{8}}$, 4021); near top of Jebel Safariat ($S_{\frac{3}{2}}$, 4066), specimens numerous, but with eroded and worn tests, which are generally devoid of detailed characters, except that some of them show the madreporite.

EXPLANATION OF PLATE XV.

LINTHIA OBLONGA.

Cretaceous (Cenomanian): Sinai.

- FIG. 1.—Abactinal view of Duncan's largest specimen (9004), slightly tilted to show the anal region.
 „ 2.—Left side view of same specimen.
 „ 3.—Abactinal view of Duncan's second specimen (9003), also slightly tilted to show anal region.
 „ 4.—Left side view of same, exhibiting the peripetalous and lateral fascioles.
 „ 5.—Abactinal view of one of Mr. Barron's specimens ($S_{\frac{3}{11}}$), tilted as before, for anal characters.
 „ 6.—Left side view of same, showing obscure fascioles.
 „ 7.—Pores of the antero-lateral ambulacra, enlarged.
 „ 8.—Pores of the anterior ambulacrum enlarged, showing their oblique character and the dividing calcareous band.
 Figs. 7 and 8 represent enlargements, whilst the remaining figures are of the natural size.

V. — ON THE OCCURRENCE OF AN OPISTHOCÆLIAN DINOSAUR (*ALGOASAUROS BAURI*) IN THE CRETACEOUS BEDS OF SOUTH AFRICA.

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LAST year, while the Port Elizabeth Brick and Tile Company were quarrying a clayey rock at Despatch, near Uitenhage, a number of bones were discovered in the rock. Though the discovery created some little interest, no one seems to have appreciated the scientific value of the find, and large numbers of the bones were made into bricks. A few fragments of vertebræ and ribs have been collected by the Port Elizabeth Museum, and recently an attempt has been made to rescue some more of the bones that still remain in the rock. So far a number of very imperfect fragments of vertebræ—cervical, dorsal, and caudal—a fairly good femur, an imperfect scapula, portions of many ribs, and an ungual

phalanx, have been discovered. The examination of these remains leaves no doubt that the skeleton is that of an Opisthocoelian Dinosaur of moderate size.

The scapular fragment represented the larger portion of the lower half of the bone of the right side. The posterior border is missing, but as the coracoid border is preserved, as well as a portion of the anterior, a very good idea can be obtained of the shape of the bone. As will be seen by the figure, it resembles considerably the scapula of *Brontosaurus*, though of very much smaller size. When complete, the greatest breadth from the prescapular border to the posterior part of the glenoid process would probably be about 200 mm.

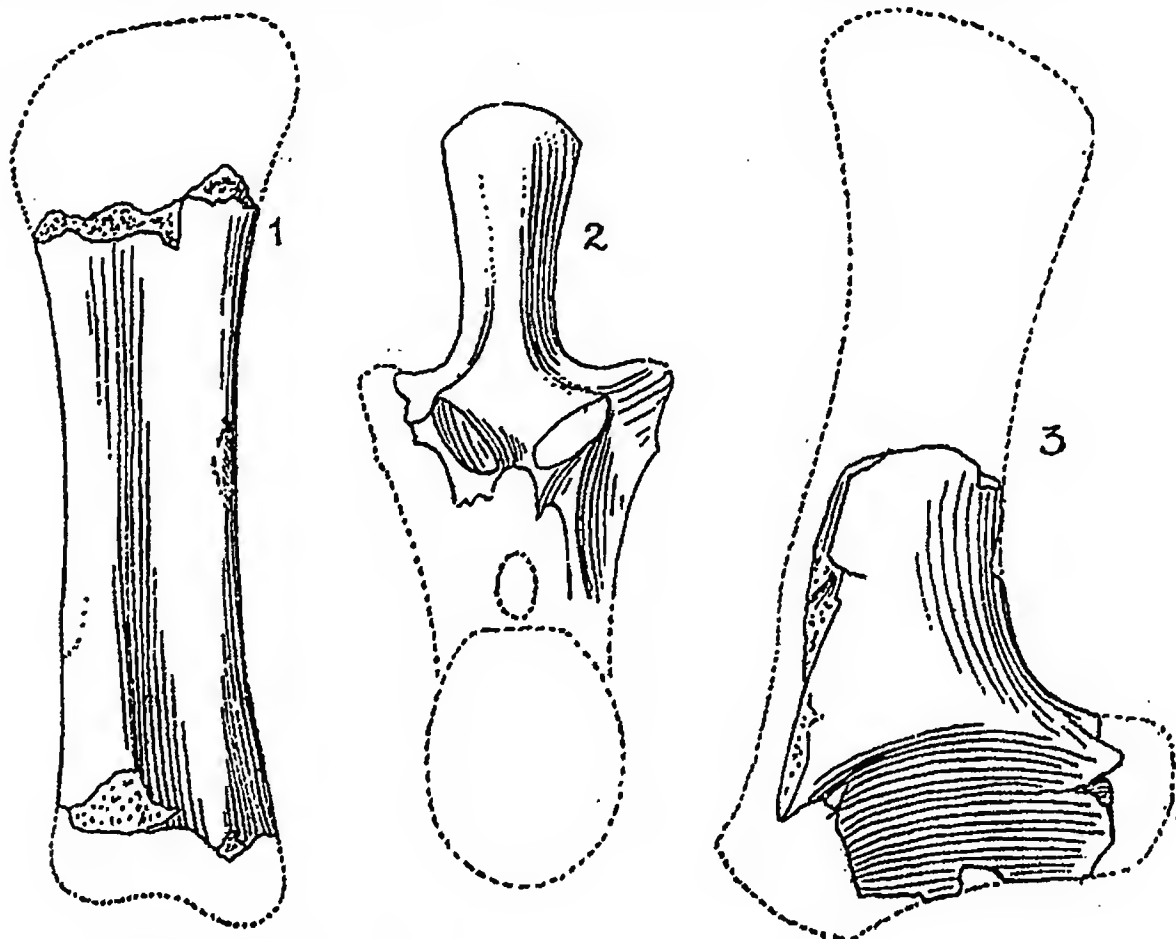


FIG. 1.—Left femur of *Algoasaurus Bauri*. $\times \frac{1}{7}$.

FIG. 2.—Posterior dorsal vertebra of *Algoasaurus Bauri*. $\times \frac{1}{7}$.

FIG. 3.—Right scapula of *Algoasaurus Bauri*. $\times \frac{1}{7}$.

The femur has lost the upper and lower ends, but otherwise is perfect. Indications of both condyles can be seen at the lower end, so that a clear idea can be obtained as to how much is missing. A considerable portion of the upper end is lost, but it is probable that the upper end was shaped as in *Diplodocus*. The fourth trochanter for the femoro-caudal muscle is of much smaller size than in either *Brontosaurus*, *Diplodocus*, or *Morosaurus*, from which we may probably infer that the tail was less powerfully developed in the South African than in the American forms. When complete, the femur is estimated to have been 500 mm. in length, or about one-third the size of that of *Diplodocus*. Across the narrowest part the femur measures 120 mm.

Most of the vertebræ are too fragmentary to warrant description, but from the fragments it is manifest that the vertebræ have borne

considerable resemblance to those of *Diplodocus*. The few fragments of centra of the body vertebrae show the peculiar excavations seen in the centra of the American types. The best preserved vertebra is the one figured. It is probably one of the posterior dorsals. The spine shows a complicated arrangement of laminae very similar to that of the spines of the posterior dorsals of *Diplodocus*, but owing to the condition of the specimen it is difficult to represent this in the figure. The height of the vertebra, when complete, would probably be about 450 mm., or less than half the size of the last dorsal of *Diplodocus*.

I propose to name this new reptile *Algoasaurus Bauri*, after the late George Baur, whose early death removed from the ranks of investigators one who could ill be spared.

VI.—NOTE ON A PILLOW-LAVA APPARENTLY FORMING A CONTINUOUS HORIZON FROM MULLION ISLAND TO GORRAN HAVEN IN CORNWALL.

By G. T. PRIOR, M.A., F.G.S.

THE basalt of Mullion Island, with the intercalated radiolarian chert, is well known from the descriptions of Teall and Howard Fox.¹ It is a fine-grained minutely vesicular basalt, consisting mainly of radiating felspar laths and interstitial pale purplish-brown augite, and occurring in peculiar pillowy or bale-like masses. Owing to this curious structure and its intercalation with the chert the basalt is considered to be a submarine lava.

A well-marked horizon of radiolarian chert similar to that of Mullion Island has been traced by Mr. Howard Fox² from that island across the Lizard peninsula to Porthallow, and thence to the other side of Falmouth Bay to Pendower and Gorran Haven.

Lately, in the company of Mr. Upfield Green, I have made a collection of igneous and other rocks from the north of the Lizard, south of Helford river, and from the neighbourhood of Gorran and Caerhayes on the other side of Falmouth Bay. Many of the volcanic rocks are almost precisely similar, both in pillow structure and in microscopical characters, to the Mullion Island basalt. The following is a list of the localities, besides Mullion Island, at which this particular kind of basalt was found:—

Tregidden.—The basalt occurs here in two quarries on opposite sides of the stream; in one of them to the east the pillow structure of the rock is well marked. In microscopical characters the basalt is precisely similar to that of Mullion Island. It is finely vesicular, and shows minute interlacing felspar laths with much interstitial pale purplish-brown augite, and little or no iron-oxides. It varies in coarseness of grain, and in parts is much altered, so that the augite is unrecognizable. To the west of Tregidden, nearer to Mullion Island, precisely similar basalt was met with at Trethewy.

¹ Quart. Journ. Geol. Soc., vol. xlix (1893), p. 211.

² Trans. Roy. Geol. Soc. Cornwall, xii (1), 1896, p. 39.